

DOCKET NO.: NOVA-0076

PATENT

#5



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Michael S. Dobres, Aidyn Mouradov and
Hong Zhang

Serial No.: 09/911,588

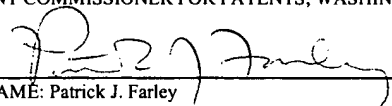
Group Art Unit: TBA

Filing Date: July 24, 2001

Examiner: TBA

For: Transformation of Plants by Electroporation of Cultured Explants

DATE OF DEPOSIT: December 20 2001
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STATEMENT TO SUPPORT FILING AND SUBMISSION IN ACCORDANCE
WITH 37 CFR §§ 1.821 THROUGH 1.825

- ☒ I hereby state, in accordance with the requirements of 37 C.F.R. §1.821(f), that the contents of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 CFR §1.821(c) and (e), respectively are the same.
- ☒ I hereby state that the submission filed in accordance with 37 CFR §1.821(g) does not include new matter.
- ☐ I hereby state that the submission filed in accordance with 37 CFR §1.821(h) does not include new matter or go beyond the disclosure in the international application as filed.
- ☐ I hereby state that the amendments, made in accordance with 37 CFR §1.825(a), included in the substitute sheet(s) of the Sequence Listing are supported in the application, as filed, at pages _____. I hereby state that the substitute sheet(s) of the Sequence Listing does (do) not include new matter.



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/911,588
Source: OIPE
Date Processed by STIC: 08/02/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/911,588

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ **Wrapped Nucleics**
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."

- 2 ☐ **Invalid Line Length** The rules require that a line not exceed 72 characters in length. This includes white spaces.

- 3 ☐ **Misaligned Amino**
 Numbering The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.

- 4 ☐ **Non-ASCII** The submitted file was not saved in ASCII(DOS) text, as **required** by the Sequence Rules. Please **ensure your subsequent submission is saved in ASCII text**.

- 5 ☐ **Variable Length** Sequence(s) ☐ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

- 6 ☐ **PatentIn 2.0**
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) ☐. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

- 7 ☐ **Skipped Sequences**
 (OLD RULES) Sequence(s) ☐ missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

- 8 ☐ **Skipped Sequences**
 (NEW RULES) Sequence(s) ☐ missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000

- 9 ☐ **Use of n's or Xaa's**
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

- 10 ☐ **Invalid <213>**
 Response Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

- 11 ☒ **Use of <220>** Sequence(s) ☐ missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

- 12 ☐ **PatentIn 2.0**
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

AMC – Biotechnology Systems Branch – 06/04/2001

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.



OIPE

RAW SEQUENCE LISTING

DATE: 08/02/2001

PATENT APPLICATION: US/09/911,588

TIME: 14:25:48

Input Set : A:\nova76.ST25.txt

Output Set: N:\CRF3\08022001\I911588.raw

3 <110> APPLICANT: Dobres, Michael S.
 4 Mouradov, Aidyn
 5 Zhang, Hong
 7 <120> TITLE OF INVENTION: TRANSFORMATION OF PLANTS BY ELECTROPORATION OF CULTURED
 EXPLANTS
 9 <130> FILE REFERENCE: NOVA-0076
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/911,588
 C--> 11 <141> CURRENT FILING DATE: 2001-07-24
 11 <160> NUMBER OF SEQ ID NOS: 10
 13 <170> SOFTWARE: PatentIn version 3.1
 15 <210> SEQ ID NO: 1
 16 <211> LENGTH: 21
 17 <212> TYPE: DNA
 C--> 18 <213> ORGANISM: artificial *Errored*
 W--> 20 <220> FEATURE:
 W--> 20 <223> OTHER INFORMATION:
 20 <400> SEQUENCE: 1
 21 agctgtgctc gacgttgta c
 24 <210> SEQ ID NO: 2
 25 <211> LENGTH: 20
 26 <212> TYPE: DNA
 C--> 27 <213> ORGANISM: artificial
 W--> 29 <220> FEATURE:
 W--> 29 <223> OTHER INFORMATION:
 29 <400> SEQUENCE: 2
 30 aatcgggagc ggcgataccg
 33 <210> SEQ ID NO: 3
 34 <211> LENGTH: 21
 35 <212> TYPE: DNA
 C--> 36 <213> ORGANISM: artificial
 W--> 38 <220> FEATURE:
 W--> 38 <223> OTHER INFORMATION:
 38 <400> SEQUENCE: 3
 39 cgtggtgatg tggagtattg c
 42 <210> SEQ ID NO: 4
 43 <211> LENGTH: 19
 44 <212> TYPE: DNA
 C--> 45 <213> ORGANISM: artificial
 W--> 47 <220> FEATURE:
 W--> 47 <223> OTHER INFORMATION:
 47 <400> SEQUENCE: 4
 48 ttgcagcaga aaagccgcc
 51 <210> SEQ ID NO: 5
 52 <211> LENGTH: 21
 53 <212> TYPE: DNA
 C--> 54 <213> ORGANISM: artificial
 W--> 56 <220> FEATURE:
 W--> 56 <223> OTHER INFORMATION:

Does Not Comply
 Corrected Diskette Needed

*A description is mandatory in
 field 223 when the response in
 field 213 is Artificial or
 Artificial Sequence.*

20

21

19

The types of errors shown exist throughout the Sequence Listing. Please check
 subsequent sequences for similar errors.

file://C:\CRF3\G...

8/2/01

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/911,588

DATE: 08/02/2001

TIME: 14:25:48

Input Set : A:\nova76.ST25.txt

Output Set: N:\CRF3\08022001\I911588.raw

```

56 <400> SEQUENCE: 5
57 ggaaagcttc ggatttggag c 21
60 <210> SEQ ID NO: 6
61 <211> LENGTH: 32
62 <212> TYPE: DNA
C--> 63 <213> ORGANISM: artificial
W--> 65 <220> FEATURE:
W--> 65 <223> OTHER INFORMATION:
65 <400> SEQUENCE: 6
66 cggctgcagc gtctgaaata aaacaataga ac 32
69 <210> SEQ ID NO: 7
70 <211> LENGTH: 22
71 <212> TYPE: DNA
C--> 72 <213> ORGANISM: artificial
W--> 74 <220> FEATURE:
W--> 74 <223> OTHER INFORMATION:
74 <400> SEQUENCE: 7
75 tgaggatcct ttgcgatgat tg 22
78 <210> SEQ ID NO: 8
79 <211> LENGTH: 20
80 <212> TYPE: DNA
C--> 81 <213> ORGANISM: artificial
W--> 83 <220> FEATURE:
W--> 83 <223> OTHER INFORMATION:
83 <400> SEQUENCE: 8
84 ttggtacccc agagtcccgc 20
87 <210> SEQ ID NO: 9
88 <211> LENGTH: 25
89 <212> TYPE: DNA
C--> 90 <213> ORGANISM: artificial
W--> 92 <220> FEATURE:
W--> 92 <223> OTHER INFORMATION:
92 <400> SEQUENCE: 9
93 tgtggcathtt attgaaatgg cactg 25
96 <210> SEQ ID NO: 10
97 <211> LENGTH: 29
98 <212> TYPE: DNA
C--> 99 <213> ORGANISM: artificial
W--> 101 <220> FEATURE:
W--> 101 <223> OTHER INFORMATION:
101 <400> SEQUENCE: 10
102 ctatatctag acatcgtaat tttaagacg 29

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/911,588

DATE: 08/02/2001

TIME: 14:25:49

Input Set : A:\nova76.ST25.txt

Output Set: N:\CRF3\08022001\I911588.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:20 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:20 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:27 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:29 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:29 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:36 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:38 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:38 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:45 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:47 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:47 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:54 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:56 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:56 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:63 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:65 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:65 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:72 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:74 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:74 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:81 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:83 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:83 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:90 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:92 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:92 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:99 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:101 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:101 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: